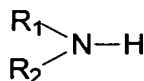


CLAIMS

1. A liquid resin, intended in particular for the sizing of mineral fibers,  
 5 exhibiting a dilutability in water at 20°C at least equal to 1 000%, **characterized in that** it is composed essentially of condensates obtained from a phenolic compound, from formaldehyde and from an aminoalcohol according to the Mannich reaction.

2. The resin as claimed in claim 1, **characterized in that** the phenolic  
 10 compound is phenol, a cresol, resorcinol or a mixture of these compounds.

3. The resin as claimed in claim 1 or 2, **characterized in that** the aminoalcohol is chosen from the compounds of formula



in which R<sub>1</sub> and R<sub>2</sub>, which are identical or different, represent H or a linear or  
 15 branched C<sub>1</sub>-C<sub>10</sub>, preferably C<sub>2</sub>-C<sub>5</sub>, hydrocarbonaceous chain which can include one or more unsaturations and one or more OH radicals, at least one of R<sub>1</sub> or R<sub>2</sub> including at least one OH radical.

4. The resin as claimed in claim 3, **characterized in that** the OH radical is carried by the terminal carbon atom of the hydrocarbonaceous chain and,  
 20 preferably, each R<sub>1</sub> and R<sub>2</sub> radical carry a hydroxyl functional group on the terminal carbon of the hydrocarbonaceous chain.

5. The resin as claimed in claim 4, **characterized in that** the aminoalcohol is monoethanolamine or diethanolamine.

6. The resin as claimed in one of claims 1 to 5, **characterized in that** it  
 25 exhibits a level of free formaldehyde of less than 0.4%.

7. The resin as claimed in one of claims 1 to 6, **characterized in that** it exhibits a level of free phenolic compound of less than 0.02%.

8. The resin as claimed in one of claims 1 to 7, **characterized in that** it exhibits a level of free formaldehyde of less than 0.25%, a level of phenolic  
 30 compound of less than 0.01% and an infinite dilutability.

9. The resin as claimed in one of claims 1 to 8, **characterized in that** it exhibits a level of ash of less than 0.04% by weight of dry resin.

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